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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/695,474

10/28/2003

Tomonori Gotoh

FUJS 20.713

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EXAMINER

RIVAS, SALVADOR E

ART UNIT

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2619

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/695,474	<b>Applicant(s)</b> GOTOH ET AL.	
	<b>Examiner</b> SALVADOR E. RIVAS	<b>Art Unit</b> 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 21, 2008 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 3-5, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over by admitted prior art (**U.S. Patent Application Publication #2004/0085966 A1**) in view of **Xu et al. (U.S. Patent Application Publication #2002/0114333 A1)**.

Regarding **claim 1**, the admitted prior art teach a transmitter (Fig.13 @ 1-1) in a network where a plurality of transmitters have an individual specific address (Fig.13) and are connected through different transmission paths so that a packet with information about a source address is transmitted,

said transmitter (Fig.15) comprising: a plurality of transmission path ports respectively connected to said different transmission paths for receiving said packet (Fig.15 @ 111, 121, 131, 141); and

each transmission path port being adapted to send said packet to and receive said packet from one of said transmission paths ("This makes it possible to relay a packet received via the receiving ports 111, 121, 131, or 141 to a relay transmitter from which the received packet reaches its destination (destination transmitter)." Paragraph [0008]); and

a relay section (Fig.15 @ 160) for relaying the received packet to a relay transmission path of said transmission paths by which said received packet reaches its destination (Fig.14);

wherein said relay section comprises:

a table (read as table register (Fig.15 @ 180)) for storing information about the relay of said received packet to one of said transmission path ports connected to said relay transmission path, correlated with a port identifier of each said transmission path port and the source address of the transmitter that transmitted said packet (read as table register, Fig.15 @ 180, used for storing "...a transmitting port number for relaying data for each destination address.", paragraph [0017] Lines 6-8); and

a router (read as routing processing unit (Fig.15 @ 170)).

However, the admitted prior art fails to teach a router for extracting the port identifier of the transmission path port that received said packet and said source address contained in said received packet, and

routing said received packet to one of said transmission path ports, which is connected to said relay transmission path, by referring to said table for said extracted port identifier and source address,

wherein said router comprises:

a receiving port extracting part for extracting the receiving port identifier of the transmission path port that received said packet; a source address extracting part for extracting the source address contained in said received packet; and

a routing part for performing said routing by referring to said table in response to said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part,

wherein said routing part comprises:

a judging part for judging whether or not to relay said received packet by referring to said table,

based on said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part; and

an assigning part for assigning said received packet to a transmission path port when it is judged by said judging part that said received packet is to be relayed,

said assigning part comprising a plurality of transmitting parts each corresponding to a respective one of said transmission path ports,

said judging part outputs a plurality of judged results for said plurality of transmitting parts, respectively, and

each of said plurality of transmitting parts outputs said received packet to a respective one of said transmission path ports on the basis of a corresponding judged result from said judging part.

Xu et al. teach a device (read as call control manager (Fig. 1 @ 36)), Paragraph [0042] Lines 2-6) for sending datagrams representing real time streaming media frames to a client independent of whether the client is served by a network address proxy.

a router (Fig. 1 @ 36) for extracting the port identifier of the transmission path port that received said packet and said source address contained in said received

Art Unit: 2619

packet (“call control manager 36 can extract a source network address and a source port number from datagrams originated by client 16 (and translated by NAT server 28) to identify a destination network address and port number to which datagrams can be sent ...” (Paragraph [0042])), and

routing said received packet to one of said transmission path ports, which is connected to said relay transmission path, by referring to said table for said extracted port identifier and source address (read as the call control manager (Fig.1 @ 36) can be coupled with a directory server (Fig. 1 @ 38) that “... maintains a client table database 42 that associates each client 14, 16, and 18 to a client identifier that is stable and to a network address currently assigned to the client.” (Paragraph [0040] Lines 8-11)),

wherein said router comprises:

a receiving port extracting part (Fig. 1 @ 36) for extracting the receiving port identifier of the transmission path port that received said packet (Paragraph [0042]));

a source address extracting part (Fig. 1 @ 36) for extracting the source address contained in said received packet (Paragraph [0042])); and

a routing part for performing said routing by referring to said table (Fig. 3b @ 48) in response to said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part (read as the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).),

wherein said routing part comprises:

a judging part (read as session relay (Fig.1 @ 46)) for judging whether or not to relay said received packet by referring to said table (read as the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).),

based on said receiving port identifier extracted by said receiving port extracting part and said source address extracted by said source address extracting part (Paragraph [0042]); and

an assigning part (read as session table (Fig.1 @ 48, Fig. 3b @ 48)) for assigning said received packet to a transmission path port when it is judged by said judging part (Fig.1 @ 46) that said received packet is to be relayed (the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).),

said assigning part (Fig.1 @ 48, Fig. 3b @ 48) comprising a plurality of transmitting parts each corresponding to a respective one of said transmission path ports (read as RTP Channel port numbers (Fig. 3b @ 48)),



said iudging part (Fig.1 @ 46, Fig. 3b @ 46) outputs a plurality of judged results for said plurality of transmitting parts (read as RTP Channels (Fig. 3b @ 48)), respectively, and

each of said plurality of transmitting parts (read as RTP Channels (Fig. 3b @ 48)) outputs said received packet (read as an IP datagram) to a respective one of said transmission path ports (read as RTP Channel port numbers (Fig. 3b @ 48)) on the basis of a corresponding judged result from said iudging part (Fig.1 @ 48, Fig. 3b @ 48).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include mechanisms for extracting certain datagram parameters, a session table, and a function of maintaining a session table as taught by Xu et al. within the system of the admitted prior art for the purpose of efficiently establishing data packet transmission control.

Regarding **claim 3**, and **as applied to claim 1 above**, the admitted prior art, as modified by Xu et al., teaches a transmitter (Fig.13 @ 1-1, Fig.15 @ ) wherein, as said information about the relay of said received packet correlated with said receiving port identifier and said source address, said table (read as a table register, Fig.15 @ 180) stores both information that said received packet is not relayed if it circulates within said network, and information that said received packet is relayed if it does not circulate within said network (Fig.15 @ 180 “ stores...data”, paragraph [0017], 6-7).

Regarding **claim 4**, and **as applied to claim 3 above**, the admitted prior art, as modified by Xu et al., teaches the transmitters wherein said network has a mesh path or ring path through which said received packet can circulate (Fig.13).

**Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over by admitted prior art (**U.S. Patent Application Publication #2004/0085966 A1**) in view of **Xu et al. (U.S. Patent Application Publication #2002/0114333 A1)** and further view of **Yonekura (U.S. Patent Application Publication #2002/0087730 A1)**.

Regarding **claim 5**, and **as applied to claim 1 above**, the admitted prior art, as modified by Xu et al., teaches the transmitters wherein in the case where a path to a destination transmitter is divided into a plurality of paths and has a redundant structure (as read by the ring topology in Fig.13, where the “counter-rotating ring” forms a redundant topology), said received packet is routed by said router (read as routing processing unit, Fig.15 @ 170).

Xu et al. teach a device (read as call control manager (Fig. 1 @ 36)), Paragraph [0042] Lines 2-6) for sending datagrams representing real time streaming media frames to a client independent of whether the client is served by a network address proxy.

However, the admitted prior art and Xu et al., fails to teach the transmission path ports to relay said received packet are assigned in said table so that many of them are not relayed only to a specific path forming said redundant structure.

Yonekura teaches a content relay device (Fig.1 @ 10a) that “...regards users of the portable telephone sets 20a as service target members, and manages a name, a contact address, authentication information, and the like, for each member in a member

Art Unit: 2619

information database.” (Paragraph [0040] Lines 9-14) Furthermore, Yonekura teaches the transmission path ports to relay said received packet are assigned in said table (read as member information database) so that many of them are not relayed only to a specific path forming said redundant structure. (“... content relay service device manages a member information database in which a member is registered, and the member is a service receiver who uses a browser installed terminal subscribed to a communication service of a data amount charging type network connected to the Internet.” Paragraph [0016]) Therefore, it would have been obvious to a person of ordinary skill in the art to combine the member information database taught by Yonekura and mechanisms for extracting certain datagram parameters, a session table, and a function of maintaining a session table as taught by Xu et al. within the relay transmitter of admitted prior art for the purpose of being able to find a convenient path for packet routing between device on a communication network.

**Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over by **Xu et al. (U.S. Patent Application Publication #2002/0114333 A1)** in view of **Gardell et al. (U.S. Patent # 6,298,062 B1)**.

Regarding **claim 8**, Xu et al. teach a packet transmission method for a network where transmitters with an individual address are connected through different transmission paths so that a packet with information about the address of a source transmitter is transmitted from the source transmitter to a destination transmitter (read as a method executed by an intermediate device (read as a telephony service provider (Fig.1 @ 34) with a call control manager (Fig. 1 @ 36) and directory server (Fig.1 @

Art Unit: 2619

38)), Paragraph [0042] Lines 2-6) for sending datagrams representing real time streaming media frames to a client independent of whether the client is served by a network address proxy.),

in a relay transmitter (read as a telephony service provider (Fig.1 @ 34) with a call control manager (Fig. 1 @ 36) and directory server (Fig.1 @ 38)) between said source transmitter (read as Callee Client (Fig.2a @ 18)) and said destination transmitter (read as Caller Client (Fig.2a @ 16))

a port extracting step of extracting the receiving port identifier in a packet received through said transmission path (“call control manager 36 can extract a source network address and a source port number from datagrams originated by client 16 (and translated by NAT server 28) to identify a destination network address and port number to which datagrams can be sent ...” (Paragraph [0042])),

an address extracting step of extracting a source address contained in said received packet (Paragraph [0042]), and

a routing step of routing said received packet, based on said extracted receiving port identifier and said extracted source address (read as the call control manager (Fig.1 @ 36) can be coupled with a directory server (Fig. 1 @ 38) that “... maintains a client table database 42 that associates each client 14, 16, and 18 to a client identifier that is stable and to a network address currently assigned to the client.” (Paragraph [0040] Lines 8-11)),

wherein said routing step comprises:

a judgement step (read as session relay (Fig.1 @ 46)) of judging whether or not to relay said received packet for each of a plurality of transmission paths (read as the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).), based on said extracted port identifier and said extracted source address (Paragraph [0042]); and

an assignment step in which, when it is judged in said judgement step that said received packet is to be relayed (read as the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).),

said received packet is assigned to a transmission port corresponding to one of said plurality of transmission paths (Paragraph [0042]), and

when it is judged in said judgement step that said received packet is not to be relayed (read as the call control manager maintains a session table (Fig. 3b @ 48) that is used to compare the extracted datagrams parameters in order to establish a session connection between different users if no match for parameters are found on the session table the parameters are added onto the session table (Fig. 3b @ 48, Fig. 7).).

However, Xu et al. fails to teach wherein information that said received packet is not relayed is issued and

said received packet is not assigned to a correlated transmission port corresponding to another of said plurality of transmission paths.

Gardell et al. teach method and apparatus with "... novel capabilities for telephonic communications over a computer network." (Column 2 Lines 38-40) Furthermore, Gardell et al. teach a routing method ("... provides call routing services for calls originating in a SCN as well as for calls originating in an IP network." Column 2 Lines 65-67) wherein information (read as an incoming call) that said received packet (read as an IP packet) is not relayed is issued ("... determining whether the terminal end-point is unavailable to receive the incoming call;" Column 3 Lines 20-21) and

said received packet is not assigned to a correlated transmission port corresponding to another of said plurality of transmission paths ("... if the terminal end-point is unavailable, determining an appropriate network-resident service sub-system to receive the call;" Column 3 Lines 21-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the mechanism for determining and executing actions for call routing services based on packet information as taught by Gardell et al. within the system with mechanisms for extracting certain datagram parameters, a session table, and a function of maintaining a session table as taught by Xu et al. for the purpose of efficiently establishing data packet transmission control.

### ***Conclusion***

3. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Any inquiry concerning this communication or early communications from the Examiner should be directed to Salvador E. Rivas whose telephone number is (571) 270-1784. The examiner can normally be reached on Monday-Friday from 7:00AM to 3:30PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Chirag G. Shah can be reached on (571) 272- 3144. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2619

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Salvador E. Rivas*  
S.E.R./ser

August 22, 2008

**/Chirag G Shah/  
Supervisory Patent Examiner, Art Unit 2619**